

REMARKS

Claims 1-9 remain in the application. Applicants note with appreciation the indication of allowable subject matter in claims 8 and 9, but respectfully request reconsideration of the application and allowance of all claims in view of the above amendments and the following remarks.

The rejection stated in paragraph 1 of the Office action is respectfully traversed. Claim 6 is not an omnibus claim but recites a series of four method steps. The basis for the examiner's rejection is not understood. Claim 6 has now been rewritten in independent form, but further clarification is respectfully requested if the rejection is to be maintained.

Claims 1-5 stand rejected as unpatentable over Lindoff et al in view of Namgoong. This rejection is respectfully traversed.

The present invention is directed to an improved technique for removing the static and dynamic components of interference induced in a signal when it is translated to a lower frequency. The receiver includes a high pass filter following the frequency transposer for filtering out the static and dynamic components of the interference, with the high pass filter having a predetermined cut-off frequency to eliminate the static component and a portion of the dynamic component before the signal enters a digitizer, with the rest of the dynamic component being eliminated by a digital filter placed after the digitizer and a corrector.

Lindoff et al teaches a receiver, and the examiner has noted the filters 140 and 170 as corresponding to the claimed high pass filter. However, as state in the passage cited by the examiner, the filters 140 and 170 are low pass filters. The examiner cites Namgoong for its

teaching of using a high pass filter instead, but it is respectfully submitted that the combination of these teachings in the manner proposed by the examiner could only result through hindsight. Lindoff et al states very clearly at lines 27-29 of column 3 that the purpose of the filters 140 and 170 is to remove “transient” signals from the baseband I and Q signals. There is no talk of DC and there is no suggestion that the “transient” signal being removed is a low frequency transient. Clearly, the intended function in Lindoff et al could not be accomplished with high pass filters. Thus, to change the filters in order to satisfy the language of present claim 1 would require that one render the Lindoff et al circuit unsuitable for the purpose for which it was intended.

Further, the claim refers to a portion of the dynamic component being removed by the high pass filter and then the rest of the dynamic component being removed by the digital filter after the digitizer. Lindoff et al does not discuss partial removal of the dynamic component by the filters 140 and 170. Lindoff et al further does not discuss at all the use of the filters 155 or 165 for removal of a dynamic signal component that was introduced by the down conversion and was not completely removed by the first filter, but instead the filters 155 and 165 are provided only for the purpose of removing digitizing noise. Thus, even if the teachings of the references were combined in some manner, there is nothing which would have suggested to the artisan that the filters 155 or 165 should be designed to remove residual interference from the down conversion.

Finally, the claim calls for the residual interference to be removed not just by a digital filter but also by a corrector. The examiner has referred to the 190 in Fig. 1 and the elements 230, 250 and 260 in Fig. 2 as the claimed corrector, but this is not supported. Fig. 2 is a DC

Offset compensation means, and the circuitry therein does not serve any function of removing residual ac components of interference from the down conversion. There is similarly no such function ascribed to the signal processor 190.

Claims 6 and 7 stand rejected as unpatentable over Popovic. This rejection is respectfully traversed.

Claim 6 is directed to a method of estimating a residual dynamic component of interference to a received signal, the residual component being that which is left over after the portion is removed. This concept appears nowhere in Popovic. Further, Popovic teaches nothing more relevant than the concept of averaging a measured interference value over some period of time. The examiner has referred to step 54 in Fig. 9, but there is no mention there of averaging over a time slot. The example given in Fig. 9 is an FTPC time period, and this is a Fast Transmit Power Control algorithm as noted at lines 10-20 of column 2. Again, there is no mention of a time slot. The claim requires determining the number of time slots which separate two consecutive calculations of the average value over a time slot. The examiner has referred attention to lines 22-35 of column 2, but there is no mention there of either a time slot of separating consecutive calculations of average value by some number of time slots. These are not mere differences in nomenclature. The essential features of claim 6 are simply not taught or suggested in Popovic. Accordingly, claim 6 and all of its dependent claims are believed patentable over the applied art.

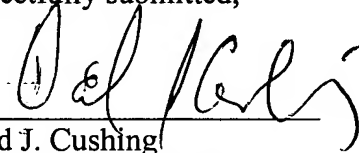
In view of the above, reconsideration and allowance of this application are now believed to be in order, and such actions are hereby solicited. If any points remain in issue which the

Amendment Under 37 C.F.R. § 1.111
USSN 10/066,695

Examiner feels may be best resolved through a personal or telephone interview, the Examiner is kindly requested to contact the undersigned at the telephone number listed below.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

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CUSTOMER NUMBER

Date: July 22, 2005